

UPDATED
Biological Resources Report
for the
Japatul Valley Desilt Pond Project
L-14369, PDS 2002-2700-14369

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Updated Summary Biology Report

From: Vince Scheidt, Certified Biological Consultant



Date: Revised May 22, 2019
~~December 27, 2018~~

RE: Biological Resources, Project Impacts, and Mitigation - Japatul Valley Desilt Pond Project
PDS 2002-2700-14369

Per your recent request, we have completed an updated biology field study of the Japatul Valley Desilt Pond project located on a 17-acre portion (Figure 1) of the APN 523-120-28 & -32 parcels in the Japatul Valley area of unincorporated San Diego County. This field study was completed on 5/11/18 between 1:00 and 3:15 pm. Weather conditions were clear with no wind and temp in the low 70's. As you know, we first surveyed this site in 2004 and 2005, so the purpose of this update is to verify that site conditions have not changed significantly since that time. The purpose of the original survey (conducted on 21 December 2004 and updated on 18 November 2005) was to forensically identify and document the site's flora and fauna (Table 1), the habitat-types within the study area surrounding the pond (Figure 2), grading-related impacts (Table 2), and mitigation, if required. The original violation consisted of grading for pond construction and the creation of a berm to contain silt and runoff. For analysis purposes, the original "study area" associated with said pond was defined by the County of San Diego as the grading area for desilt pond construction and no less than 200' beyond the limits of grading on APN 523-120-28 & -32. A small portion of the study area supports a desilt pond, which was constructed without the appropriate permits, hence the need for forensic analysis at that time. The current project (PDS 2002-2700-14369) involves the placement of two 6" overflow pipes along with a small energy dissipater at the outfall of the pipe. The entire area of the currently-proposed improvements was evaluated as part of the original desilt pond construction. No other improvements of any kind are being proposed, including offsite improvements. As a result of this study, we are able to summarize the following biological issues as they relate to approval of the Japatul Valley Desilt Pond project, PDS 2002-2700-14369:

Habitats

Non-native Grassland (Holland code #42200) – 4.0 acres

A portion of the area where the desilt pond is found formerly supported Non-native Grassland (NNG). Indicators in this habitat include Long-beaked Stork's-bill (*Erodium botrys*), Rippgut Brome (*Bromus diandrus*), and Perennial Mustard (*Hirschfeldia incana*). Flat-top Buckwheat (*Eriogonum fasciculatum*) and Deerweed (*Acmispon glaber*) were also observed in lower numbers. Although there are low numbers of Flat-top Buckwheat and Deerweed, these are so sparse that they do not qualify as a discrete habitat-type and they are therefore considered a part of the NNG. NNG is found on most of the property, including the surrounding open fields, and all areas directly associated with the existing agricultural use of the property. At the time of the original survey, the pond had been graded (Figure 1), and a large area on the northern side of the berm was holding water. There were also many signs that cattle were grazing on the site, using water in the desilt pond and foraging in the NNG. On the south side of the berm was a small, offsite detention pond that was also holding water at the time of the survey. By 2018, both the desilt pond

and the offsite detention pond were well established, supporting a diverse flora and fauna (see additions to Table 1). The berm structure itself is also stable and well vegetated with native species.

Southern Coast Live Oak Riparian Forest (Holland code #61310) – 1.0 acres

The area mostly offsite to the south and east of the desilt pond supports Southern Coast Live Oak Riparian Forest (SCLORF) vegetation. The dominant tree species in this area is Coast Live Oak (*Quercus agrifolia*) with occasional Willows (*Salix* spp.) and others. The habitat is mostly open with an understory of subshrubs including White Sage (*Salvia apiana*), Poison Oak (*Toxicodendron diversilobum*), and others. The riparian forest is of high habitat value, remaining undisturbed even with signs of the cattle grazing adjacent to the area. For the most part, it appears that cattle continue to stay entirely out of the riparian forest area.

Mixed Oak Woodland (Holland code # 77000) – 4.5 acres

Several offsite and onsite areas support Mixed Oak Woodland (MOW) vegetation. Indicators in this habitat include Coast Live Oak, Engelmann Oak (*Quercus engelmannii*), Poison Oak, and various herbaceous understory species. Although Engelmann Oaks are co-dominants of the habitat in the Study Area, the larger community (surrounding the Study Area over the remainder of the property) qualifies as Mixed Oak Woodland based on its species composition. Engelmann Oak Woodland (Holland code #71180), a similar habitat-type, is overwhelmingly dominated by *Q. engelmannii*. This habitat is not represented in the Study Area.

Mixed Chaparral (Holland code #37000) – 2.0 acres

Areas onsite and offsite to the east and west, and a few areas to the south support Mixed Chaparral (MC) vegetation. This habitat includes mostly shrubby species such as Bigberry Manzanita (*Arctostaphylos glauca*), Chamise (*Adenostoma fasciculatum*), White Sage, Flat-top Buckwheat, and Interior Scrub Oak (*Quercus berberidifolia*). Also present are Coast Live Oaks within the habitat in limited numbers.

Flat-top Buckwheat (Holland code #11300) – 5.5 acres

Several disturbed and/or grazed areas adjoining the desilt pond qualify as having supported Flat-top Buckwheat (FTB) prior to pond construction. These areas support Flat-top Buckwheat shrubs and a sparse weedy cover of Ripgut Brome and Perennial Mustard (NNG elements).

Wetlands

CDFW (State) and USACE (Federal) Wetlands

The Open Water in the pond and in the offsite detention pond definitely qualify as a California Department of Fish and Wildlife (CDFW)-defined wetlands and "Waters of the State". They probably also qualify as U.S. Army Corps of Engineers (USACE)-defined "Waters of the United States" and possibly federal wetlands. However, due to the man-made nature of these features, they would not qualify as a County (RPO) wetland. As previously stated, the Open Water resource is unvegetated with the exception of aquatic plants. The perimeter of the pond supports a mix of hydrophytes and upland weeds - this is clearly a man-made habitat although it is of locally significant wildlife value as a seasonal water source (not as a wetland). Portions or all of the SCLORF would also qualify as state and/or federal wetlands/waters supporting hydrophytes and wetlands hydrology. Prior to the establishment of the desilt pond, the area would have been classified as an upland swale (non-RPO), carrying flow only during major storm events and containing upland plant species.

Soils

Soils onsite consist of Fallbrook sandy loam, 9 to 15 percent slopes, eroded (FaD2), Cienega-Fallbrook rocky sandy loams, 30 to 65 percent slopes, eroded (CnG2), and Greenfield sandy loam, 2 to 5 percent slopes (GrB).

Flora and Fauna

Eighty-five species of vascular plants and eighteen species of animals were detected during the 2018 field survey of the property. These are listed in Table 1. This list represents a characteristic flora and fauna associated with non-native grasslands, chaparral-based habitats, and riparian forests in this part of San Diego County. Most of the species detected are common to this area.

Sensitive Species

Two sensitive plants and four sensitive animals were observed as utilizing the Japatul Valley Desilt Pond project site during the field surveys. These are Engelmann Oak, Delicate Clarkia, Two-striped Garter Snake, Western Bluebird, Blainville's Horned Lizard, and Southern Mule Deer:

Engelmann Oak

Quercus engelmannii

Listing: CRPR list: List 4.2

"San Diego County Sensitive Plants, List D Plant" (PDS, 2011)

State/Global Rank: S3/G3

Distribution: Interior areas of San Diego, Orange, and Los Angeles Counties, western Riverside County, and adjacent Baja California. Reported localities in San Diego County include Mesa Grande, Valley Center, Escondido, Ramona, Lee Valley, and other areas. Specimens are relatively rare outside San Diego County except in adjoining areas.

Habitat(s): Occurs on upper fringes of oak woodlands, in a "savanna-like" habitat in native grasslands, and on sheltered slopes in chaparral vegetation.

Status on Site: Several mature specimens are found onsite. Those in proximity to the desilt pond are shown in Figure 2.

Delicate Clarkia

Clarkia delicate

Listing: CRPR list: List 1B.2

"San Diego County Sensitive Plants, List A Plant" (PDS, 2011)

State/Global Rank: S3/G3

Distribution: Found within areas of San Diego County, and adjacent Baja California. Specimens are relatively rare outside San Diego County.

Habitat(s): Occurs on fringes of oak woodlands and in chaparral vegetation.

Status on Site: A handful of flowering specimens were observed in the understory of the oak woodland to the south of the existing desilt pond dam.

Two-striped Garter Snake

Thamnophis hammondi

Listing: Federal: none

State status: "Species of Special Concern" (CDFW, 2018)

County status: San Diego County Sensitive Animal List, Group 1 (PDS, 2012)

Distribution: San Diego County south through northern Baja California.

Habitat(s): Resident in most wetland habitats, including vernal pools, ponds, creeks, and floodways.

Status on site: A single juvenile specimen observed foraging at the edge of the pond.

Western Bluebird

Sialia mexicana

Listing: "Blue List" (Tate, 1986).

County status: San Diego County Sensitive Animal List, Group 2 (PDS, 2011)

Distribution: This species occurs throughout the western United States, although it has declined in portions of its range as nesting habitat (holes in trees, nest boxes, etc.) are consumed by competing species, particularly Starlings (*Sturnus vulgaris*).

Habitat: Western Bluebirds inhabit open areas, especially at the edges of woodlands, near farms, etc.

Status on Site: Two individuals were observed foraging the area north of the open water. They most likely use the area regularly when there is open water behind the dam.

San Diego Horned Lizard

(*Phrynosoma coronatum blainvillei*)

Listing: "Endangered" (San Diego Herpetological Society, 1980)

"California Species of Special Concern" (CDFG, 2018)

Distribution: San Diego Coast Horned Lizard is a bizarre, flattened saurian that feeds almost exclusively on harvester ants. This familiar species occurs in cismontane and transmontane areas of open sage scrub, grassland, chaparral, and woodland from Ventura County south into northern Baja California. Throughout their range, horned lizards are declining as a result of habitat destruction and occasional collecting for pets. Many species have been eliminated from much of their ranges as a result of urbanization and agricultural conversion.

Habitat(s): Found in open areas in a variety of habitats; chaparral, sage scrub, desert scrub, etc. Dependent on the presence of Harvester Ants.

Status on site: A single juvenile San Diego Coast Horned Lizard was seen foraging on the banks above the desilt pond.

Mule Deer (*Odocoileus hemionus*)

Listing: "MSCP Indicator" (County of San Diego, 1992)

County status: San Diego County Sensitive Animal List, Group 2 (PDS, 2011)

Distribution: Much of western North America from Mexico to southern Canada. Fairly common in San Diego County foothills.

Habitat(s): Woodlands, chaparral, sage scrub, grasslands. Usually indicated by distinctive scats, occasionally by sightings of specimens themselves.

Status on Site: Characteristic tracks detected in the mud at the edge of the desilt pond.

In addition to the above, various other wide-ranging or cryptic species might be anticipated to occur on the Japatul Valley Desilt Pond site. No critical or highly sensitive populations of any species would be anticipated, however. One sensitive species (Quino Checkerspot Butterfly *Euphydryas editha quino*) is known to occur to the south and west on similar properties. Quino indicators and host plants, listed in the 2014 U.S. Fish and Wildlife Service Quino Checkerspot Butterfly Survey Guidelines, such as Dot-seed Plantain (*Plantago erecta*), Patagonian Plantain (*Plantago patagonica*), White Snapdragon (*Antirrhinum coulterianum*), Thread-leaved Bird's Beak (*Cordylanthus rigidus*) and Purple Owl's-clover (*Castilleja exserta*) were absent from the study area. With the absence of these indicator species from the 0.04-acre project site and surrounding habitat, this very rare species is not expected. Sensitive species known from the vicinity, along with an assessment of the probability of occurrence onsite, are presented in Table 3.

Other Unique Features/Resources

The Japatul Valley Desilt Pond project does not support any locally or regionally unique features or biological resources. It does not provide any unique foraging or hill-topping. It does not support any rock outcroppings or any sensitive soils. The oak trees located near the basin are probably used as roosting habitat for avian species. Areas south of the pond, within proposed biological open space, may serve as a local wildlife corridor bringing wildlife from lands to the south beneath the oak woodland canopy. This area will provide additional raptor foraging habitat within the FTB, MOW, and MC habitats found in the

open space. The dense to open vegetative cover of the habitats found within the proposed open space will allow for better wildlife movement and will serve as a functioning corridor for resident wildlife.

Project Impacts and Mitigation Requirements

The approval of a grading permit for the proposed Japatul Valley Desilt Pond project is subject to review under the California Environmental Quality Act (CEQA). This means that the County requires that project-related direct, indirect, and cumulative impacts to native habitat and species be “less than significant”, as defined by CEQA. This usually requires the adoption of mitigation measures intended to reduce “significant” impacts to a level that is “less than “significant”. Project-related direct impacts, as we have identified them, are presented in Table 2. The project will not result in any significant indirect or cumulative impacts due the nature of the violation and the amount of time that has passed since the violation took place. The current project (0.04 acre of NNG) is too small in inconsequential to result in any indirect or cumulative impacts.

Construction of the existing desilt pond in 2002 removed approximately one acre of NNG and one acre of FTB vegetation from the site. This impact is considered "significant" as defined by CEQA. However, an open water body was created, which is filled seasonally via precipitation.. This open water has significant habitat value, although not “in kind” with that which had been impacted.

Forensic analysis indicates that the impacts associated with construction of the existing desilt pond are considered potentially “significant”, as stated above. Current County policy requires mitigation for "significant" project impacts to most natural habitats, and the County is requiring mitigation for NNG and FTB.

In addition to the original NNG impacted in 2002, an additional 0.04-acre of NNG will be impacted by the installation of a two 6" drainage pipes which are being installed along the southern edge of the existing berm. These pipes are being installed per the County's requirements.

Potential impacts to sensitive species, such as Delicate Clarkia (*Clarkia delicata*), Engelmann Oak (*Quercus engelmannii*), Western Bluebird (*Sialia mexicana*), Two-striped Garter Snake (*Thamnophis hammondi*), Blainville's Horned Lizard (*Phrynosoma blainvillii*), and Southern Mule Deer (*Odocoileus hemionus fuliginatus*) have been avoided by reducing the scope of the project to the overflow pip installation in including the trench and energy dissipater. In any case, any incidental impacts to sensitive species shall be mitigated through the dedication of onsite biological open space. Based on the very small footprint of proposed improvements, impacts to these species are not actually anticipated.

The project footprint avoids any impacts to oak trees on the site. The 50-foot oak tree root zone protection area will remain entirely undisturbed during the installation of the two 6" drainage pipes.

As stated, construction of the desilt pond in 2002 converted a small amount of annual grassland and buckwheat scrub to open water. However, the pond is currently stable, and provides significant biological resource value because it supports sensitive species (such as Two-striped Garter Snake and Southern Mule Deer) as well as a diversity of other native wildlife.

At this time, it is strongly recommended that the existing desilt pond be allowed to remain in its existing condition, because it is completely stable (biologically, hydrologically, and geologically) and because it supports a diversity of native wildlife, including sensitive species. The pond already has adequate capacity to hold sufficient water during storm events and has an effective spillway at the southwestern corner to contain any significant overflows. The proposed 6" pipes will be installed approximately 5 feet below the top of the berm and approximately 7 feet above the bottom of the desilt basin itself. This will prevent permanent impoundment of water and the need for vector control, etc. There are no structures

located to the south of the pond that would be threatened by flooding under any circumstance. In addition, removal of the berm and full draining of the pond will not be required during construction, as this would result in temporary but significant impacts to an existing open water ecosystem, supporting sensitive species, that have become established over the last 16 years.

Given the site's circumstances as described above and in order to satisfy the County policy of requiring mitigation for impacts to sensitive habitats, the following mitigation measures are recommended (see Table 2), based on an onsite open space easement:

1. Provide 6.0-acres of onsite FTB or "better" mitigation, which is equivalent to 1.0 acre at a 6-to-1 ratio for all impacts to FTB, which are considered "significant" pursuant to the County's Guidelines.
2. Provide 2.08-acres of onsite NNG or "better" mitigation, which is equivalent to 1.04 acre at a 2-to-1 ratio for impacts to NNG, which are considered "significant" pursuant to the County's Guidelines.

The mitigation ratios above are doubled from the current County of San Diego policy standards because they are being applied retroactively. All mitigation will be provided in-kind or "better".

This means that no less than 6.0 acres of FTB and 2.08 acre of NNG (or "better" = higher value habitat) shall be conserved in an onsite dedicated Biological Open Space Easement and 100' Limited Building Zone (LBZ) Easement designated for that purpose. The project design includes a recommended open space area to the immediate south of the pond. This area supports both habitat-types (approximately 3.5-acres of FTB with areas of NNG within the FTB) along with higher value habitats including approximately 0.7 acre of SCLORE, approximately 2.3-acres of MOW, and approximately 1.6-acres of chaparral. Of the 8.10-acre proposed open space easement, 8.0 acres of FTB, MOW, and MC within the open space will be allocated to the mitigation for the past violation and the additional 0.1-acre of MOW will be allocated to the currently proposed improvements to the property (two 6" pipes). The presence of FTB as well as other higher value or equal value habitats in excess of that impacted fully satisfies the mitigation requirements for both the violation and the current design. MOW is of significantly higher habitat value than NNG, and it provides long term viability to resident wildlife, increased wildlife diversity, and increased biological function within the area. Onsite open space dedication over this area shall require fencing or signage indicating that this area is a biological preserve, and grazing, etc. would not be allowed in this area (see Figure 5). The dedication of this easement would be made a Specific Condition of Project Approval. However, because the project is subject to County Ordinance #8365 (see below), the Wildlife Agencies may need to be contacted via a "batching meeting" with respect to the take of FTB and the recommended preserve design.

Pursuant to Habitat Loss Permit Ordinance #8365 of the San Diego County Code, the applicant may be required to obtain a Habitat Loss Permit (HLP) to "cover" impacts to CSS habitat onsite. Construction of the desilt pond removed approximately 1.0 acre of FTB, which is considered a variant of CSS by the County and the Wildlife Agencies.

Site brushing, grading, and/or the removal of vegetation within 300 feet of any potential migratory songbird or raptor nesting location should not take place during the spring/summer songbird breeding season, defined as from 1 January to 31 August of each year. This is required in order to ensure compliance with the federal Migratory Bird Treaty Act and Sections 3503, 3503.5 and 3513 of the California Fish and Game Code, which prevents the "take" of eggs, nests, feathers, or other parts of most native bird species, and the Endangered Species Act. Limiting activities to the non-breeding season will minimize chances for the incidental take of migratory songbirds or raptors. Should it be necessary to conduct brushing, grading, or other construction activities during the bird breeding season, a pre-grading nesting survey of all areas within 300 feet of the proposed activity will be required. The results of the survey will be provided in a report to the Director, Planning and Development Services Department and the Wildlife Agencies for concurrence with the conclusions and recommendations.

In the circumstance where modification (grading) of the existing pond is mandated by the County, the project may impact jurisdictional wetlands that have become established within the existing desilt pond. If so, it may be necessary to obtain various agency permits, including a California Department of Fish and Wildlife 1600-series Lake and Streambed Alteration Agreement (LSA), Section 401 Water Quality Certification from the California Regional Water Quality Control Board, and a Section 404 permit from the ACOE. These agencies function in a permitting capacity in the event of wetland impacts. As mentioned previously, any additional grading and associated habitat impacts is not necessary and is not recommended.

The current project does not propose any offsite or other site improvements. Should any future improvements be required or proposed, they would be potentially subject to subsequent environmental review.

Table 1. Updated Flora and Fauna Checklist – Japatul Valley Desilt Basin Project

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants</u>	
<i>Achillea millefolium</i>	Yarrow
<i>Acmispon americanus</i>	Spanish Clover
<i>Acmispon glaber</i>	Deerweed
<i>Acmispon</i> sp.	Lotus
<i>Acourtia microcephala</i>	Sacapalote
<i>Ambrosia psilostachya</i>	Western Ragweed
<i>Anagallis arvensis</i> *	Scarlet Pimpernel
<i>Adenostoma fasciculatum</i>	Chamise
<i>Arctostaphylos glauca</i>	Bigberry Manzanita
<i>Artemisia californica</i>	California Sagebrush
<i>Avena fatua</i> *	Slender Wild Oat
<i>Baccharis salicifolia</i>	Mule Fat
<i>Baccharis sarothroides</i>	Broom Baccharis
<i>Bromus diandrus</i> *	Ripgut Brome
<i>Bromus hordeaceus</i> *	Soft Brome
<i>Bromus rubens</i> *	Foxtail Brome
<i>Bromus tectorum</i> *	Cheat Brome
<i>Calochortus splendens</i>	Splendid Mariposa Lily
<i>Ceanothus tomentosus</i>	Ramona Lilac
<i>Centaurea melitensis</i> *	Tocalote
<i>Cerastium glomeratum</i> *	Mouse-ear Chickweed
<i>Cirsium vulgare</i> *	Bull Thistle
<i>Clarkia delicata</i>	Delicate Clarkia
<i>Clarkia purpurea</i>	Winecup Clarkia
<i>Clarkia</i> sp.	Clarkia
<i>Corethrogyne filaginifolia</i> var. <i>virgata</i>	Sand Aster
<i>Croton setiger</i>	Dove Weed
<i>Dichelostemma capitatum</i>	Blue Dicks
<i>Eleocharis</i> sp.	Spike-rush
<i>Eriophyllum confertiflorum</i>	Golden Yarrow
<i>Eriogonum fasciculatum</i>	Flat-top Buckwheat
<i>Erodium botrys</i> *	Long-beaked Stork's-bill
<i>Eschscholzia californica</i>	California Poppy
<i>Filago gallica</i> *	Narrow-leaf Filago
<i>Galium angustifolium</i>	Bedstraw
<i>Galium aparine</i> *	Bedstraw
<i>Gnaphalium palustre</i>	Lowland Cudweed
<i>Gnaphalium californicum</i>	California Cudweed
<i>Hazardia squarrosa</i>	Hazardia
<i>Hedypnois cretica</i> *	Crete Weed
<i>Heliotropium curassavicum</i>	Wild Heliotrope
<i>Hesperoyucca whipplei</i>	Our Lord's Candle
<i>Hirschfeldia incana</i> *	Perennial Mustard
<i>Hordeum murinum</i> *	Wild Barley

Table 1. Updated Flora and Fauna Checklist – Japatul Valley Desilt Basin Project

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants</u>	
<i>Hypochaeris glabra</i> *	Smooth Cat's-tongue
<i>Juncus mexicanus</i>	Mexican Rush
<i>Lactuca serriola</i> *	Wild Lettuce
<i>Lolium multiflorum</i> *	Italian Ryegrass
<i>Lonicera subspicata</i>	Wild Honeysuckle
<i>Lythrum hyssopifolia</i>	Lythrum
<i>Medicago polymorpha</i> *	Bur Clover
<i>Melilotus indicus</i> *	Indian Sweet Clover
<i>Nassella pulchra</i>	Purple Stipa
<i>Nasturtium officinale</i> *	White Watercress
<i>Navarretia hamata</i>	Skunkweed
<i>Paeonia californica</i>	California Peony
<i>Penstemon spectabilis</i>	Showy Penstemon
<i>Polygonum</i> sp. *	Knotweed
<i>Polypogon monspeliensis</i> *	Rabbitfoot Grass
<i>Potamogeton nodosus</i>	Longleaf Pondweed
<i>Pseudognaphalium luteoalbum</i> *	Jersey Cudweed
<i>Quercus agrifolia</i>	Coast Live Oak
<i>Quercus berberidifolia</i>	Interior Scrub Oak
<i>Quercus engelmannii</i>	Engelmann Oak
<i>Rhamnus californica</i>	Coffee Berry
<i>Rhamnus crocea</i>	Redberry
<i>Rhamnus ilicifolia</i>	Redberry
<i>Rhus aromatica</i>	Fragrant Sumac
<i>Rumex crispus</i> *	Curly Dock
<i>Salix gooddingii</i>	Black Willow
<i>Salvia apiana</i>	White Sage
<i>Salvia mellifera</i>	Black Sage
<i>Sidalcea sparsifolia</i>	Southern Checkerbloom
<i>Silene gallica</i> *	Common Catchfly
<i>Solanum parishii</i>	Chaparral Nightshade
<i>Sonchus asper</i> *	Spiny Sowthistle
<i>Spergularia rubra</i>	Red Sand Spurry
<i>Stellaria media</i> *	Chickweed
<i>Stuckenia pectinata</i> *	Fennel-leaf Pondweed
<i>Tamarix ramosissima</i> *	Red Tamarisk
<i>Toxicodendron diversilobum</i>	Poison Oak
<i>Verbena lasiostachys</i>	Verbena
<i>Vicia villosa</i>	Winter Vetch
<i>Vulpia myuros</i> *	Foxtail Fescus

Table 1. Updated Flora and Fauna Checklist – Japatul Valley Desilt Basin Project

<u>Scientific Name</u>	<u>Common Name</u>
<u>Birds</u>	
<i>Agelaius phoeniceus</i>	Red Wings Blackbird
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Carpodacus mexicanus</i>	Housefinch
<i>Charadrius vociferus</i>	Killdeer
<i>Dendroica coronata</i>	Audubon's Warbler
<i>Melospiza melodia</i>	Song Sparrow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Sayornis nigricans</i>	Black Phoebe
<i>Sialia mexicana</i>	Western Bluebird
<i>Spinus psaltria</i>	Lesser Goldfinch
<i>Tyrannus verticalis</i>	Western Kingbird
<u>Reptiles</u>	
<i>Thamnophis hammondi</i>	Two-striped Garter Snake
<i>Phrynosoma blainvillii</i>	Blainville's Horned Lizard
<u>Mammals</u>	
<i>Canis latrans</i>	Coyote
<i>Lynx rufus</i>	Bobcat
<i>Neotoma</i> sp.	Woodrat
<i>Odocoileus hemionus fuliginatus</i>	Southern Mule Deer
<i>Spermophilus beecheyi</i>	California Ground Squirrel
<p>* - non-native taxon</p> <p>bold - sensitive taxon</p>	

Table 2. Impact/Mitigation Analysis – Japatul Valley Desilt Pond Project ¹

Biological Resource	Study Area	Acres Impacted	Mitigation Required	Onsite Preservation
2001 Impacts				
NNG	4.0 acres	1.0 acres	2.0 acres (1.0 @ 2:1)	1.6 acres of MC and 0.4 acre of MOW
FTB	5.5 acres	1.0 acres	6.0 acres (1.0 @ 6:1)	3.5 acres of FTB, 1.80 MOW, and 0.7 acre of SCLORF
SCLORF	1.0 acres	none	none	-
MOW	4.5 acres	none	none	0.02 acre
MC	2.0 acres	none	none	-
Totals	17.0 acres	2.0 acres	8.0 acres	8.1 acres
2018 Impacts				
NNG	0.04	0.04	0.08 acres (0.04 @ 2:1)	0.08 acre of MOW
Totals	0.04	0.04	0.08 acres	-
Grand Total	17.04 acres	2.04 acres	8.08 acres	8.10 acres

¹ Assumes that the existing desilt pond is permitted and that no additional grading or habitat destruction is required.

Figure 1. Current Aerial Photograph Showing Study Area and Existing Pond



Figure 2. Forensic Vegetation and Oak Tree Map

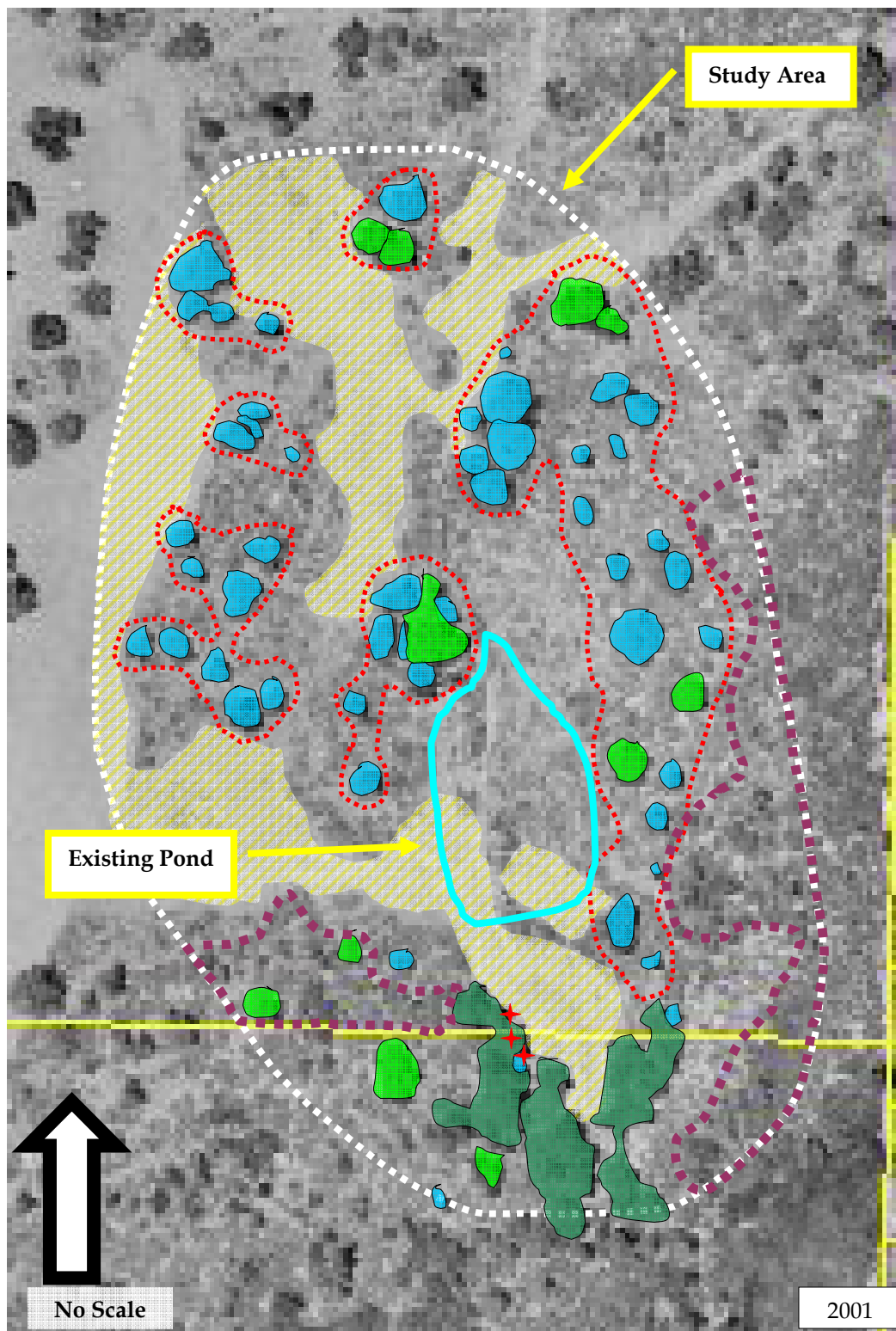


Figure 3. Proposed Onsite Open Space Vegetation Map

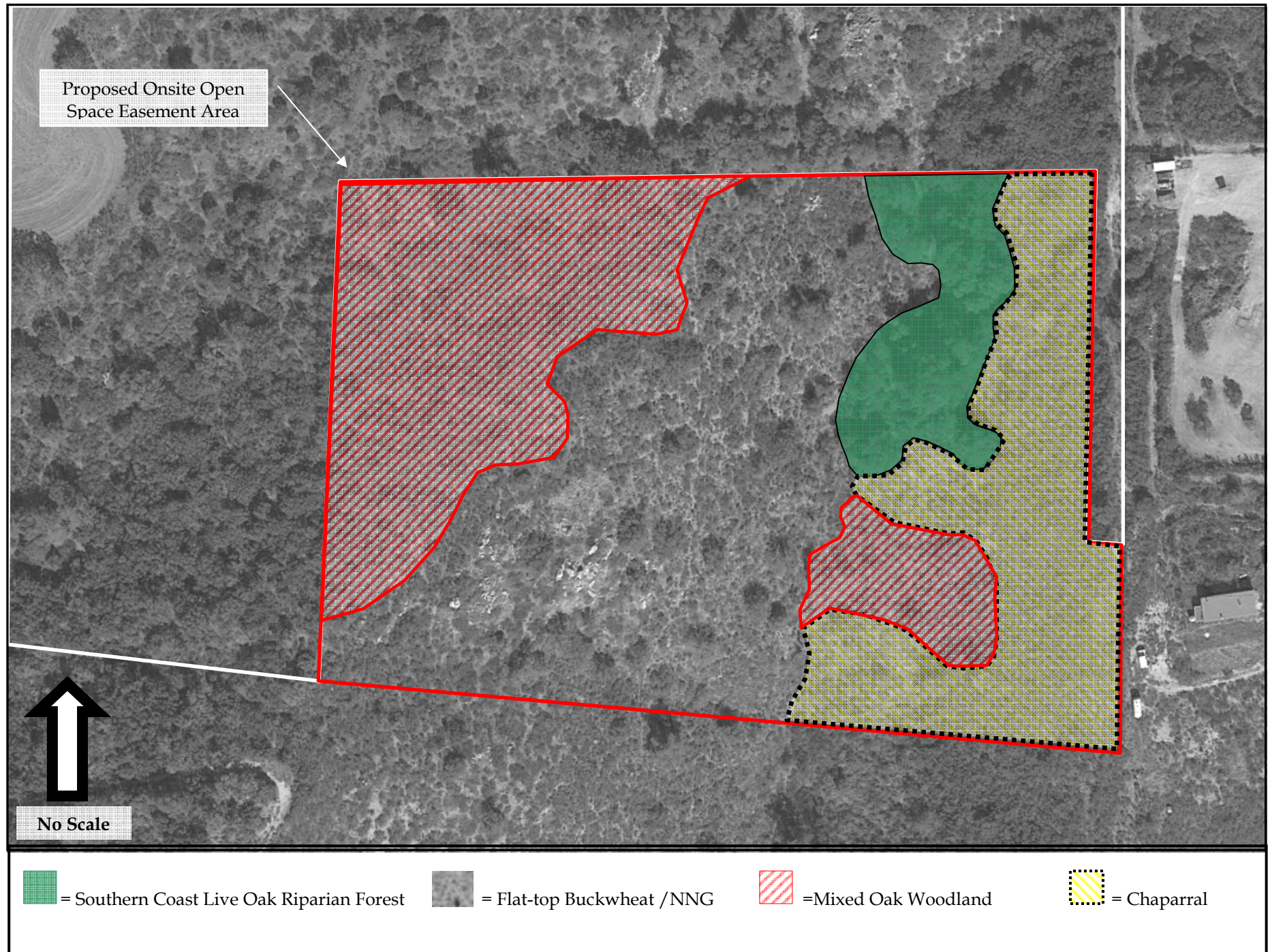


Table 3. Sensitive Species known from the Vicinity - Japatul Valley Desilt Pond Project

Figure 4. Site Plan showing Original Grading (2001) and Proposed New Improvements

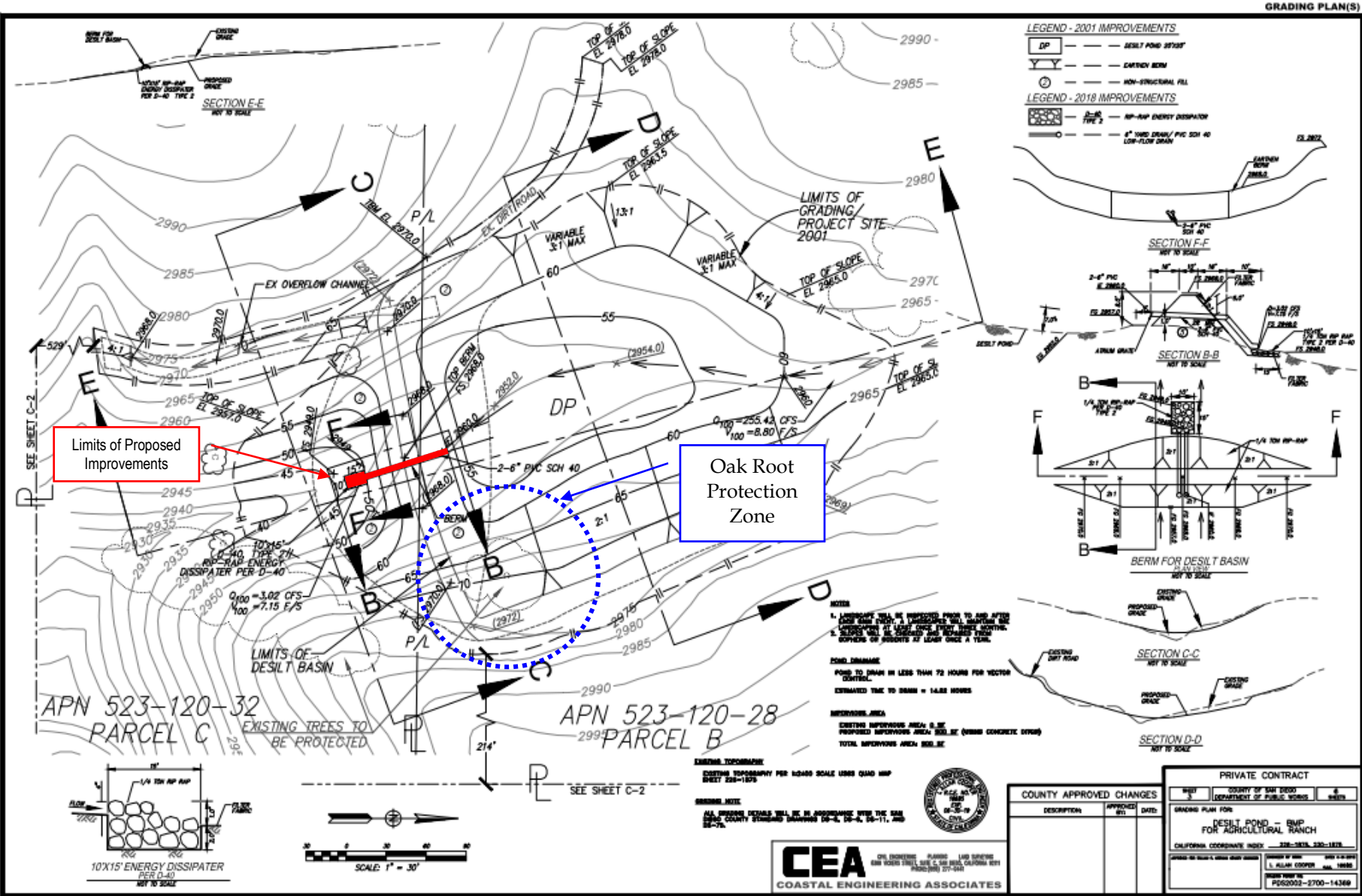


Table 3. Sensitive Species known from the Vicinity - Japatul Valley Desilt Pond Project

Figure 5. Open Space Exhibit showing Connectivity to Offsite Conserved Lands and Proposed Fencing/ Signage

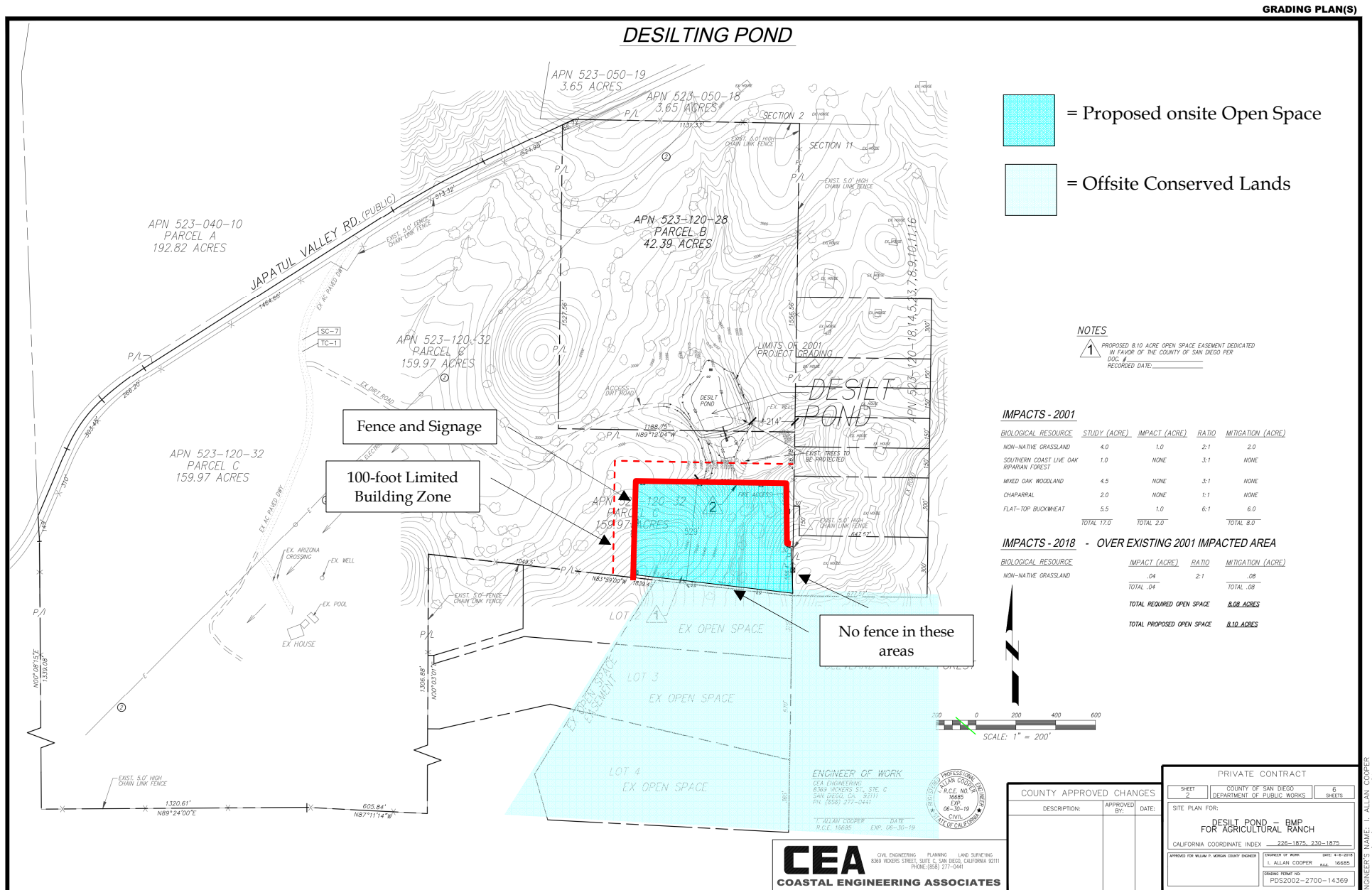


Table 3. Sensitive Species known from the Vicinity - Japatul Valley Desilt Pond Project

Scientific Name	Common Name	Federally Endangered	Federally Threatened	State Endangered	State Rare	MSCP "Narrow Endemic" Species	County Sensitive Species	List/Group	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Probability of Occurrence	Factual Basis for Determination	
<i>Acanthomintha ilicifolia</i>	San Diego Thornmint		X	X		X	A	X			X			X								X				L	1a	
<i>Arctostaphylos otayensis</i>	Otay Manzanita						A		X						X											L	1a	
<i>Astragalus deanei</i>	Dean's Milkvetch						A	X		X	X		X													L	1a	
<i>Brodiaea orcuttii</i>	Orcutt's Brodiaea						A			X	X	X	X									X				M	2a	
<i>Calochortus dunnii</i>	Dunn's Mariposa Lily				X	X	A		X					X		X										L	1a	
<i>Chorizanthe leptotheca</i>	Peninsular Spine Flower						D		X					X												L	1a	
<i>Clarkia delicata</i>	Campo Clarkia						A						X													O	--	
<i>Comarostaphylos diversifolia</i>	Summer Holly						A		X						X											L	1a	
<i>Cupressus forbesii</i>	Tecate Cypress						A		X						X											L	1a	
<i>Gilia caruifolia</i>	Caraway Leaved Gilia						D			X				X	X											L	1a	
<i>Harpagonella palmeri</i>	Palmer's Grappling Hook						D	X		X				X												M	2a	
<i>Hemizonia floribunda</i>	Tecate Tarplant						A			X	X															L	1a	
<i>Horkelia truncata</i>	Ramona Horkelia						A		X																	L	1a	
<i>Lathyrus splendens</i>	Pride of California						D		X		X		X													L	1a	
<i>Lepechinia ganderi</i>	Gander's Pitcher Sage					X	A		X																	L	1a	
<i>Lotus crassifolius otayensis</i>	Otay Mountain Lotus						A		X						X											L	1a	
<i>Monardella hypoleuca lanata</i>	Felt Leaved Rock Mint						A		X					X												L	1a	
<i>Nolina interrata</i>	Dehesa Beargrass			X		X	A		X					X												L	1a	
<i>Piperia leptopetala</i>	Narrow-Petaled Rein Orchid						D		X			X	X	X	X											M	2a	
<i>Polygala cornuta fishiae</i>	Fish's Milkwort						D		X					X												L	1a	
<i>Quercus cedrosensis</i>	Cedros Island Oak						A		X							X										L	1a	
<i>Quercus engelmannii</i>	Engelmann Oak						D				X	X														O	--	
<i>Ribes canthariforme</i>	Morena Currant						A		X																	L	1a	
<i>Satureja chandleri</i>	San Miguel Savory						A		X					X												L	1a	
<i>Senecio ganderi</i>	Gander's Butterweed				X		A		X					X												L	1a	
<i>Tetracoccus dioicus</i>	Parry's Tetracoccus						A		X					X												L	1a	
<i>Accipiter cooperi</i>	Cooper's Hawk						1				X	X	X													M	2a	
<i>Accipiter striatus</i>	Sharp-Shinned Hawk						1	X					X		X											L	1a	
<i>Agelaius tricolor</i>	Tricolored Blackbird						1			X	X							X								L	1a	
<i>Ammodramus savannarum</i>	Grasshopper Sparrow						1			X																L	1a	
<i>Amphispiza belli belli</i>	Bell's Sage Sparrow						1	X	X	X				X												L	1a	
<i>Antrozous pallidus</i>	Pallid Bat						2	X	X	X	X	X	X	X	X	X	X		X	X			X			M	2b	
<i>Aquila chrysaetos</i>	Golden Eagle						1	X	X	X		X	X	X	X	X	X									L	1a	
<i>Anniella pulchra pulchra</i>	Slivery Legless Lizard						2	X		X	X												X			M	2a	

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Scientific Name	Common Name	Federally Endangered	Federally Threatened	State Endangered	State Rare	MSCP "Narrow Endemic" Species	County Sensitive Species	List/Group	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Pinon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Probability of Occurrence	Factual Basis for Determination
<i>Bassariscus astutus</i>	Ringtail							2		X				X												L	1a
<i>Cathartes aura</i>	Turkey Vulture							1	X	X	X	X	X	X	X	X										M	2a
<i>Chaetodipus californicus femoralis</i>	Dulzura Pocket Mouse							2	X	X	X		X	X	X											L	1a
<i>Chaetodipus fallax fallax</i>	San Diego Pocket Mouse							2	X	X	X			X					X	X						L	1a
<i>Charina trivirgata roseofusca</i>	Coastal Rosy Boa							2	X	X			X	X												M	2a
<i>Circus cyaneus hudsonius</i>	Northern Harrier							1			X							X		X						L	1a
<i>Cnemidophorus hyperythrus</i>	Orange-Throated Whiptail							2	X	X	X	X		X												M	2a
<i>Cnemidophorus t. multiscutatus</i>	Coastal Western Whiptail							2		X		X	X	X												M	2a
<i>Coleonyx variegatus abbottii</i>	San Diego Banded Gecko							1	X		X			X												M	2a
<i>Corynorhinus townsendii</i>	Townsend's Big-Eared Bat							2		X	X	X	X	X	X	X	X		X	X			X			M	2a
<i>Crotalus ruber ruber</i>	N. Red Diamond Rattlesnake							2	X	X				X			X		X							M	2a
<i>Danaus plexippus</i>	Monarch Butterfly							2		X			X										X			M	2b
<i>Diadophis punctatus similis</i>	San Diego Ringneck Snake							2	X	X		X	X	X	X	X										M	2a
<i>Elanus caeruleus</i>	Black-Shouldered Kite							1			X	X														M	2a
<i>Eremophila alpestris actis</i>	Horned Lark							2			X												X			M	2a
<i>Eumops perotis californicus</i>	Greater Western Mastiff Bat							2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M	2a
<i>Felis concolor</i>	Mountain Lion							2	X	X		X	X	X	X	X	X		X	X			X			L	1a
<i>Lanius ludovicianus</i>	Loggerhead Shrike							1	X		X	X	X						X	X						M	2b
<i>Laurus californicus</i>	California Gull (Non-Breeding)							2																		M	2a
<i>Lasiurus blossevilli</i>	Western Bat							2				X	X		X	X										M	2a
<i>Lepus californicus bennettii</i>	SD Black-Tailed Jackrabbit							2	X	X	X		X	X	X	X										M	2a
<i>Lycaena hermes</i>	Hermes Copper							1	X	X				X												L	1a
<i>Myotis ciliolabrum</i>	Small-Footed Myotis							2		X		X	X	X	X	X	X			X			X			M	2b
<i>Myotis evotis</i>	Long Eared Myotis							2		X		X	X	X	X	X	X						X			M	2b
<i>Myotis thysanodes</i>	Fringed Myotis							2		X		X	X	X	X	X	X						X			M	2b
<i>Myotis volans</i>	Long Legged Myotis							2		X		X	X	X	X	X	X						X			M	2b
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat							2	X			X	X	X												M	2b
<i>Nyctinomops macrotis</i>	Big Free-Tailed Bat							2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	M	2b
<i>Nyctinomops femorosaccus</i>	Pocketed Free-Tailed Bat							2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	M	2b
<i>Odocoileus hemionus</i>	Mule Deer							2	X	X	X	X	X	X	X	X	X		X	X			X			O	--
<i>Onychomys torridus ramona</i>	Southern Grasshopper Mouse							2	X	X	X			X												L	1a
<i>Phrynosoma coronatum blainvillei</i>	San Diego Horned Lizard							2	X	X	X	X		X	X											O	--
<i>Salvadora hexalepis virgulata</i>	Coast Patch-Nosed Snake							2	X	X				X			X									M	2b
<i>Scaphiopus hammondi</i>	Western Spadefoot Toad							2	X	X	X	X	X	X				X				X				M	2b
<i>Sialia mexicana</i>	Western Bluebird							2					X	X												O	--

Table 3. Sensitive Species known from the Vicinity - Japatul Valley Desilt Pond Project

Probability of Occurrence Codes:

- L** – Low Probability
- M** – Moderate Probability
- H** – High Probability
- O** – Observed; see text for detailed discussion.

Factual Basis for Determination:

- 1a** - no significant habitat (animal or plant: example - a vernal pool endemic)
- 1b** - distinctive perennial that would not have been missed if present onsite (plant: example - Coast Redwood *Sequoia sempervirens*)
- 2a** - could occur onsite based on habitat suitability and quality (plant or animal: example - Red-shouldered Hawk *Buteo lineatus*);
- 2b** - could occur onsite, but rare or cryptic (animal: example - Coronado Skink *Eumeces skiltonianus interparietalis*, and/or ephemeral species known from the immediate vicinity, but seasonal in detectability (plant: example - Thread-leaved Brodiaea *Brodiaea filifolia*)